

TNR 00-001-1098

MMI-Trutec, Inc.

HWM 03-0073

Sevier

MMi-Trutec Inc.

A SUBSIDIARY OF TRUTEC INDUSTRIES INC.

MIKE HAHN
Plant Engineer CECM

134 River Bend Drive
Sevierville, TN 37876
Email: mhahn@nitriding.com

Toll Free: 800-255-9186
Phone: 865-453-9186
Fax: 865-453-8914

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT
OFFICE CORRESPONDENCE

RECEIVED
DIV SOLID WASTE MGT

JUL 18 2003

Group No. _____ FILE NO. _____

ID No. _____

TO	DATE
RA	7/16

DATE: July 16, 2003

TO: Chuck Allen, DSWM, Nashville Central Office

FROM: Craig Smith - DSWM, EAC-K *CAS*

RE: EAR for MMI - Trutec, Inc., Sevier Co., TNR 00-001-1098
Inspection Date 6/26/03

03-H0073

A compliance inspection was conducted at MMI-Trutec, Inc on 6/26/03. A total of five violations were cited as a result of this compliance inspection. Due to the number and nature of the findings, the EAC-K is requesting enforcement action for this facility. Copies of the notice of violation and inspection report are attached for your information. If you need any additional information please contact me at 865-594-5467.

Enclosures: July 16, 2003 Notice of Violation
June 26, 2003 Hazardous Waste Inspection Report

cc: MMI - Trutec, Inc. file, Sevier Co., EAC-K



ENVIRONMENTAL ASSISTANCE CENTER
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2700 MIDDLEBROOK PIKE, SUITE 220
KNOXVILLE, TENNESSEE 37921-5602
PHONE (865) 594-6035 STATEWIDE 1-888-891-8332 FAX (865) 594-6105

THIRD NOTICE OF VIOLATION

July 16, 2003

CERTIFIED MAIL
Return Receipt Requested
No. 7001 2510 0006 2404 1582

MMI - Trutec Inc.
Phil Whaley
General Manager
134 RiverBend Drive
Sevierville TN, 37876

EPA I.D. #: TNR 00-001-1098
Sevier County

RE: 6/26/03 follow-up inspection of 7/25/02 initial inspection according to the applicable statutes and rules established by or contained in Tennessee Hazardous Waste Management Act, T.C.A. 68-212-101, et. seq., and the Tennessee Hazardous Waste Management Regulations, Tennessee Rule Chapter 1200-1-11.

Dear Mr. Whaley:

A copy of the report on the referenced Follow-up inspection is attached.

Violations of the regulations as promulgated under the Tennessee Hazardous Waste Management Act and as observed during the follow-up inspection are enumerated in the report. These violations should immediately be brought into compliance.

Please be advised that the Tennessee Hazardous Waste Management Act (Tennessee Code Annotated, Section 68-212-114) provides for civil and/or criminal penalties of up to fifty thousand dollars (\$50,000) per day for each violation. Each day upon which such violation occurs constitutes a separate punishable offense and such person shall also be liable for any damages to the State resulting therefrom.

Please feel free to contact this office if there are questions or if additional information is needed.

Sincerely,

Craig Smith

Craig Smith
Environmental Protection Specialist
Division of Solid Waste Management

cc: Robert Nakamoto - DSWM, NCO

**FOLLOW-UP
HAZARDOUS WASTE INSPECTION**

FACILITY/ PHYSICAL LOCATION:

MMI - Trutec Inc.
TNR 00-001-1098
134 River Bend Drive
Sevierville, Tennessee
Sevier County

PRIMARY CONTACT

Mike Hahn, Plant Engineer
MMI - Trutec Inc.
134 River Bend Drive
Sevierville, TN 37876
865-453-9186

DATE/TIME OF INSPECTION

6/26/03 / 12:00 pm

INSPECTION PARTICIPANTS/TITLES/AFFILIATIONS

Phil Whaley / General Manager / MMI - Trutec Inc.
Mike Hahn / Plant Engineer / MMI - Trutec Inc.
Craig Smith / Division of Solid Waste Management, EAC-K

REPORT PREPARED BY

Craig Smith
Division of Solid Waste Management
2700 Middlebrook Pike, Suite 220
Knoxville, Tennessee 37921
Phone: (865) 594-5467

PURPOSE OF INSPECTION

To perform a follow-up evaluation of MMI - Trutec Inc., in compliance with the applicable requirements of the Rules and Regulations promulgated pursuant to the Hazardous Waste Management Act, T.C.A. 68-212-101 et seq., and Hazardous Waste Reduction Act, T.C.A 68-212-301 et seq.

ALLEGED VIOLATIONS FROM INITIAL INSPECTION

Based on visual observations and other evidence gathered during the 7/25/02 inspection, MMI - Trutec Inc. is alleged to have violated the following Rules Governing Hazardous Waste Management in Tennessee:

- Rule 1200-1-11-.05(2)(g)1(i) included by reference at .03(4)(e)2(iv)
Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this subparagraph. The owner or operator must ensure that this program includes all the elements described in the document required under subpart 4(iii) of this subparagraph.

During the inspection, I found that MMI personnel have not yet been formally trained regarding handling of hazardous waste. Since the status of MMI as a hazardous waste generator was determined during 2001, MMI has relied upon instructions from hazardous waste consultants for waste-handling procedures. Phil Whaley is scheduled to receive DOT training regarding hazardous waste shipping regulations, but regulations for Large Quantity Generators require company personnel be trained within six months of hiring, with annual updates. DOT training does not provide adequate training for a hazardous waste handling supervisor.

INSPECTION FINDINGS FOR FOLLOW-UP INSPECTION

Based on visual observations and other evidence gathered during the 6/26/03 inspection, MMI - Trutec Inc. is alleged to have violated the following Rules Governing Hazardous Waste Management in Tennessee:

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In general, on-the-job training seems to have been adequate for daily operations. However, this rule also requires (by reference to 4(iii)), "A written description of the type and amount of both introductory and continuing training that will be given to [each position at the facility related to hazardous waste management]." This written description does not seem to have been created, and there does not seem to be a defined "program" of training with regard to hazardous waste.

- Rule 1200-1-11-.05(2)(g)4, included by reference at .03(4)(e)2(iv)
 - (i) *The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;*
 - (ii) *A written job description for each position listed under subpart 4(i) of this subparagraph. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining*

- unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;
- (iii) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under subpart 4(i) of this subparagraph;
- (iv) Records that document that the training or job experience required under parts 1, 2, and 3 of this subparagraph has been given to, and completed by, facility personnel.

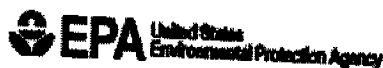
These requirements related to training records have not been met.

Craig Smith 7/16/03
Craig Smith Date
Hazardous Waste Unit
EAC-K

CONCURRENCE

R. Awasthi 7/16/03
Revendra Awasthi
Supervisor, Hazardous Waste Unit
EAC-K

cc: Robert Nakamoto, NCO



Add New Evaluation



MOORE MCMILLEN INDUSTRIES, INC. SEVIERVILLE

TNR000011098

Location of Activity: TN

Evaluation sequence: 801

Evaluation Type: CSE - HQ - COMPLIANCE SCHEDULE EVALUATION

Evaluation Date: 6/26/03

Resp. Agency: S

Reason:

Resp. Person: TN492 - CRAIG SMITH

Suborganization: TN - 03 -

Evaluation Notes:

Did this evaluation find any violations?

- ☒ Yes, violations were found.
- ☐ No, violations were not found.
- ☐ Undetermined, Agency may still be determining whether violations existed.

Cancel Coverage Areas (optional) Save Continue

URL: /CME/CME_eval_addupd.asp

FOURTH NOTICE OF VIOLATION

August 27, 2003

CERTIFIED MAIL
Return Receipt Requested
No. 7001 2510 0006 2404 1551

MMI - Trutec Inc.
Phil Whaley, General Manager
134 Rive Bend Drive
Sevierville TN, 37876

EPA I.D. #: TNR 00-001-1098
Sevier County

RE: 8/13/03 follow-up inspection of 7/25/02, 11/6/02, and 6/26/03 inspections according to the applicable statutes and rules established by or contained in Tennessee Hazardous Waste Management Act, T.C.A. 68-212-101, et. seq., and the Tennessee Hazardous Waste Management Regulations, Tennessee Rule Chapter 1200-1-11.

Dear Mr. Whaley:

A copy of the report on the referenced Follow-up inspection is attached.

Violations of the regulations as promulgated under the Tennessee Hazardous Waste Management Act and as observed during the follow-up inspection are enumerated in the report. These violations should immediately be brought into compliance.

Please be advised that the Tennessee Hazardous Waste Management Act (Tennessee Code Annotated, Section 68-212-114) provides for civil and/or criminal penalties of up to fifty thousand dollars (\$50,000) per day for each violation. Each day upon which such violation occurs constitutes a separate punishable offense and such person shall also be liable for any damages to the State resulting therefrom.

Please feel free to contact this office if there are questions or if additional information is needed.

Sincerely,

Craig Smith
Environmental Protection Specialist
Division of Solid Waste Management

cc: Robert Nakamoto - DSWM, NCO

1

**FOLLOW-UP
HAZARDOUS WASTE INSPECTION**

FACILITY/ PHYSICAL LOCATION:

MMI - Trutec Inc.
TNR 00-001-1098
134 River Bend Drive
Sevierville, Tennessee
Sevier County

PRIMARY CONTACT

Mike Hahn, Plant Engineer
MMI - Trutec Inc.
134 Rive Bend Drive
Sevierville, TN 37876
865-453-9186

DATE/TIME OF INSPECTION

8/13/03 / 1:00 pm

INSPECTION PARTICIPANTS/TITLES/AFFILIATIONS

Mike Hahn / Plant Engineer / MMI - Trutec Inc.
Craig Smith / Division of Solid Waste Management, EAC-K

REPORT PREPARED BY

Craig Smith
Division of Solid Waste Management
2700 Middlebrook Pike, Suite 220
Knoxville, Tennessee 37921
Phone: (865) 594-5467

PURPOSE OF INSPECTION

To perform a follow-up evaluation of MMI - Trutec Inc., in compliance with the applicable requirements of the Rules and Regulations promulgated pursuant to the Hazardous Waste Management Act, T.C.A. 68-212-101 et seq., and Hazardous Waste Reduction Act, T.C.A 68-212-301 et seq.

ALLEGED VIOLATIONS FROM INITIAL INSPECTION

Based on visual observations and other evidence gathered during the 7/25/02, 11/6/02 and 6/26/03 inspections, MMI - Trutec Inc. is alleged to have violated the following Rules Governing Hazardous Waste Management in Tennessee:

- Rule 1200-1-11-.05(2)(g)1(i) included by reference at .03(4)(e)2(iv)
Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this subparagraph. The owner or operator must ensure that this program includes all the elements described in the document required under subpart 4(iii) of this subparagraph.

In general, on-the-job training seems to have been adequate for daily operations. However, this rule also requires (by reference to 4(iii)), "A written description of the type and amount of both introductory and continuing training that will be given to [each position at the facility related to hazardous waste management]." This written description did not seem to have been created as of 6/26/03, and there did not seem to be a defined "program" of training with regard to hazardous waste.

- Rule 1200-1-11-.05(2)(g)4, included by reference at .03(4)(e)2(iv)
 - (i) *The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;*
 - (ii) *A written job description for each position listed under subpart 4(i) of this subparagraph. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;*
 - (iii) *A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under subpart 4(i) of this subparagraph;*
 - (iv) *Records that document that the training or job experience required under parts 1, 2, and 3 of this subparagraph has been given to, and completed by, facility personnel.*

These requirements related to training records had not been met as of 6/26/03.

INSPECTION FINDINGS FOR FOLLOW-UP INSPECTION

Based on visual observations and other evidence gathered during the 8/13/03 inspection, MMI - Trutec Inc. is alleged to have violated the following Rules Governing Hazardous Waste Management in Tennessee:

- Rule 1200-1-11-.05(2)(g)1(i) included by reference at .03(4)(e)2(iv)
Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the

3

facility's compliance with the requirements of this subparagraph. The owner or operator must ensure that this program includes all the elements described in the document required under subpart 4(iii) of this subparagraph.

In general, on-the-job training seems to have been adequate for daily operations. However, this rule also requires (by reference to 4(iii)), "A written description of the type and amount of both introductory and continuing training that will be given to [each position at the facility related to hazardous waste management]." This written description did not seem to have been created as of 8/13/03, and there did not seem to be a defined "program" of training with regard to hazardous waste.

REMARKS

The violation cited for Rule 1200-1-11-.05(2)(g)4 and its sub-parts, has been corrected, with a detailed list of all personnel, titles, and positions related to the handling of hazardous waste.

Craig Smith
Hazardous Waste Unit
EAC-K

Date

CONCURRENCE

Revendra Awasthi
Supervisor, Hazardous Waste Unit
EAC-K

cc: Robert Nakamoto, NCO

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HAZARDOUS WASTE INSPECTION**FACILITY / PHYSICAL LOCATION**

Moore McMillen Inc.
TNR 00-001-1098
134 River Bend Drive
Sevierville, Tennessee
Sevier County

PRIMARY CONTACT

Bill Moore, Owner
Moore McMillen Inc.
134 River Bend Drive
Sevierville, TN 37862
865-453-9186

DATE/TIME OF INSPECTION

7/25/02 / 11:30 am

INSPECTION PARTICIPANTS / TITLES / AFFILIATIONS

Bill Moore / Owner / Moore McMillen Inc.
Phil Whaley / Corporate Quality Manager / Moore McMillen Inc.
Craig Smith / Division of Solid Waste Management, EAC-K

REPORT PREPARED BY

Craig Smith
Division of Solid Waste Management
2700 Middlebrook Pike, Suite 220
Knoxville, Tennessee 37921
Phone: (865) 594-5467

PURPOSE OF INSPECTION

This inspection was conducted to evaluate Moore McMillen Inc. compliance with the applicable requirements of the Rules and Regulations promulgated pursuant to the Hazardous Waste Management Act, T.C.A. 68-212-101 et seq., and Hazardous Waste Reduction Act, T.C.A 68-212-301 et seq.

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FACILITY DESCRIPTION

The molten salt bath nitriding process as is used by certain industries such as Moore McMillen (MMI) to heat-treat ferrous metals, which improves strength and durability. The process generates a sludge of spent salts and spent quench and rinse waters.

Metal parts arriving for treatment at the plant are loaded into large steel racks, which carry them through each process tank on the line. The first tank is a heated alkaline wash for cleaning, and the second is a hot water rinse. After the water wash, the racks are preheated in an "air furnace" to 600°, and then begins the two-stage molten salt bath treatment process.

The two-stage process

The nitriding process requires two salt-bath immersion stages to complete. The first stage creates a layer of iron nitride, which improves strength and reduces friction. The second stage creates a layer of iron oxide, which protects against corrosion.

Stage 1: The nitriding salt bath

The first molten salt bath, the nitriding bath, contains mostly molten halide salts of carbonate and cyanate at a temperature of 1050°F. When ferrous metal is introduced to this bath, the surface of the metal is oxidized in an anaerobic environment to form a layer of ferrous nitride, which improves strength, hardness, and friction properties of the metal. This reaction also generates reactive cyanide salts in the mixture, optimally maintained at a level of about 1% of the mixture. According to Chuck Faulkner of Houghton corporation, the reactive cyanide can damage the tank if it's concentration rises above 5%, so the process must be monitored and adjusted to control the cyanide concentration. This reaction also generates metal carbonate sludge which must be removed in order to keep the reaction at peak efficiency. Removal and processing of this sludge is discussed later in this report.

The nitriding reaction steadily removes nitrogen from the baths, so it must be replaced by adding a nitrogen "regenerator." A high-nitrogen commercial compound called "Re-Nu Gold" is added for this purpose. This specific process using of the Re-Nu Gold type of regenerator was developed by Degussa-Huls corporation of Germany in the early eighties. Prior to the development of the specific salts and regenerator used in this current process, reactive cyanide salts were the standard regenerator, which required an aerated bath. (However, some operators who use the Re-Nu Gold regenerator continue to aerate the salt baths in order to provide agitation).

Metal parts must remain in the nitriding bath for thirty to ninety minutes, and sometimes more, depending on the desired depth of the layer of iron nitride. However, the second stage of the process, discussed below, requires only twenty minutes of immersion because the iron oxide layer need not infuse as deeply as the iron nitride layer. Therefore, the first stage often employs two or three nitriding salt baths in order to process parts more efficiently. The nitriding baths can be used either in series, or in time-staggered parallel, in order to keep parts moving quickly into

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the faster second stage of the process.

Stage 2: The KQ-500 Oxidizing and Quenching Salt Bath

Ferrous nitride corrodes readily when exposed to air, so the next stage, called the KQ-500 bath (an aerated bath of molten hydroxides of sodium, potassium, and sodium nitrate), creates a layer of black iron(I) oxide to protect from corrosion. Furthermore, nitrided parts must be cooled at a controlled rate for optimal strength and hardness; consequently, the KQ-500 bath is also a quenching bath, kept at 750°F in order to cool the parts at the optimal rate. Thus the KQ-500 quench tank simultaneously improves corrosion-resistance, and hardens and strengthens the nitrided metal.

Hot water quench

After approximately twenty minutes in the KQ-500 bath, the parts are removed and immersed into a 150° water quench tank, followed by three countercurrent cascading rinse tanks. Up to the year 2001, dragout from the KQ-500 bath would raise the pH in the quench and rinse tanks as high as 13, so that it was a characteristic corrosive waste. However, a carbon dioxide-sparged circulation tank has been connected to the 150° water quench tank, which keeps the pH from rising as high as it once did; therefore, MMI may be able to demonstrate that the quench and rinse waters are no longer hazardous due to the caustic characteristic.

Final processing

After rinsing and cooling, certain parts may be cleaned in a mild acid bath in order to remove dirt and metal flakes, and then polished in special polishing machines. Certain parts which require exceptional hardness or corrosion resistance may be immersed a second time into the KQ-500 bath, followed by the water quench and rinse.

Sludge processing and handling

The sludge generated in the nitriding baths is primarily metal carbonates with lesser amounts of metal cyanates, but it also contains complexed (metal) cyanides, and incidental free cyanides. Sludge collection pans are lowered into the nitriding baths each week, and solids are allowed to settle for 24 hours. Then the pans are removed from the nitriding bath and immersed into the KQ-500 tank, where the nitriding sludge reacts with the molten hydroxides and nitrate. Free and complexed cyanides from the nitriding sludge are oxidized to form carbonates, nitrates, and ammonia, which form a new sludge in the KQ-500 bath.

The KQ-500 bath has a "side sludger"; this is a non-aerated, non-agitated section of molten salt bath connected to the main bath through impeller-driven 'windows'. Sludge suspended in the agitated main bath can settle in the relatively still side sludger into a sludge pan at the bottom. This sludge pan remains in the bottom of the side sludger until it is removed and emptied once per 8-hour shift of each 24-hour day of operation. The pan is designed so that when it is removed from the tank, its contents can be mechanically dumped into a hopper. Sludge, in the form of a

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very hard and very hot cake of caustic solids, falls through the hopper and into one of two 30-gallon collection drums. These drums are stored for disposal as hazardous waste (due to chromium content).

INSPECTION FINDINGS

Based on the information provided to the Division, Moore McMillen Inc. is a Large Quantity Generator.

The 2001 Annual Hazardous Waste Stream Report filed by MMI lists the following hazardous wastes.

<i>Waste Number/Name</i>	<i>EPA Waste Codes</i>	<i>Kg Generated in 2001</i>
1) Waste Water	D002	248,000
2) Fouled Process Bath from Metals Heat Treating	D002, D007	48,841
3) Wastewater Treatment Sludge	D002, D007	900
4) Molten Salt-Based Quench Bath Sludge	D002, D007	163,000

At the time of the inspection, MMI was storing twelve drums of sludge from the KQ-500 bath (waste stream number 4), which had been drummed during the month of July. Two drums of chromium-contaminated waste-water that had been placed into overpack drums for safety, have remained in storage for over a year, awaiting a judgment from the Department regarding whether the water is characteristic or listed waste. All containers appear to be in good condition.

Waste water

Waste stream (1) is the spent countercurrent rinsewater from the final stage of the nitriding process. Rinsewater is replaced in the tanks every two weeks to prevent it from becoming saturated with salts and ineffective for rinsing. During 2001 and before, rinsewater from these tanks was neutralization using sulfuric acid, then discharged to the POTW. However, in November of 2001, chromium was detected in the rinsewater above the maximum concentration for the toxicity characteristic, so discharge was halted and MMI began having it hauled to a DuPont facility for treatment.

Under the current system, installed after the POTW discharge was eliminated, pumps move the spent water directly from the rinse tanks to a storage tank and an evaporator, both located outside the building. After volume reduction by evaporation, the remaining liquid is pumped out and hauled away. Neutralization with sulfuric acid is no longer necessary because of the carbon dioxide gas sparger now attached to the quench tank, discussed below.

Wastewater treatment sludge

When this same rinsewater was neutralized using sulfuric acid, it generated a relatively small amount of sludge, which was classified as hazardous when the toxic levels of chromium were detected in the rinsewater. This waste stream was generated and disposed in 2001, but is not being generated or disposed during 2002 because the neutralization process has been replaced. In the current process, a carbon dioxide-sparged tank controls the pH in the 150° water quench tank,

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so that the quench and rinse tanks do not become as caustic as they once did.

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Fouled Process Bath from Metals Heat Treating

This refers to used water from the 150° water quench tank. The 4000 gallons from this tank are discharged into the pit that encloses all of the salt baths and the quench and rinse tanks approximately once per month. From this pit, the water is pumped into storage tanks, which hold it until it is shipped via tanker truck to either Du Pont or Enviroline for treatment.

Molten salt-based quench-bath sludge

Waste stream (4) refers to the hardened KQ-500 bath sludge described earlier in this report. It is a caustic solid that contains carbonates, nitrates, ammonia, residual hydroxides, and other compounds. It had been disposed as a non-hazardous solid waste under a special-waste permit, and TCLP was run on samples every six months to ensure that it remained non-hazardous. However, toxic levels of chromium were detected in 2000, and since then many tons of this material have been disposed as hazardous. As described below, Mr. Moore expects that the source of chromium contamination may have already been eliminated. A TCLP will be run in August of this year to determine whether the waste is no longer hazardous.

The following records were reviewed during the inspection:

Inspection records

Manifest

Annual Hazardous Waste Stream Report

Personnel Training

Contingency plan

Because MMI has not been registered as a Large Quantity Generator for very long, not all of the required documentation is yet in place. Mr. Phil Whaley has arranged for DOT waste-handling training in August of 2002. The Contingency Plan is currently under construction. The Hazardous Waste Reduction Plan will be under development, but will not be due this year (nevertheless, several steps have already been taken, with the objective of eliminating all hazardous waste generation).

Universal waste

MMI began a collection and recycling for fluorescent light tubes in 2002, but to date has not replaced any at the plant. MMI does not ordinarily use batteries or oil.

Progress toward eliminating chromium from the wastes

Mr. Moore expects not to be a hazardous waste generator after this year. Most of the hazardous waste has the "toxicity characteristic" due to chromium content. Mr. Moore is hoping that the source of this chromium has been eliminated. He stated that the initial source of chromium was steel parts that had accumulated over time in the bottom of the salt baths. Unfortunately, around the time those salt baths were cleaned out and the parts removed, it became necessary to replace the heating elements in the KQ-500 bath. The original heating elements had been made of carbon

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steel, which does not have chromium, but in June of 2001 they were replaced with stainless-steel heating elements, which have significant amounts of chromium. When test results indicated an ongoing problem with chromium content in the waste streams, some months to determine that the new heating elements could be the source. Laboratory test data received by MMI in July of 2002 showed clearly that the heating elements were introducing significant amounts of chromium into the salt bath. Before the laboratory tests, however, in April of 2002, MMI replaced the stainless steel heating elements with carbon steel elements so the toxicity characteristic may have been eliminated at that time. Samples will be taken in August of 2002 to determine whether the chromium is gone.

VIOLATIONS

Based on visual observations and other evidence gathered during the 7/25/02 inspection, Moore McMillen Inc. is alleged to have violated the following Rules Governing Hazardous Waste Management in Tennessee.

- Rule 120-1-11-.05(2)(g)1(i)

Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this subparagraph. The owner or operator must ensure that this program includes all the elements described in the document required under subpart 4(iii) of this subparagraph.

During the inspection, I found that MMI personnel have not yet been formally trained regarding handling of hazardous waste. Since the status of MMI as a hazardous waste generator was determined during 2001, MMI has relied upon instructions from hazardous waste consultants for waste-handling procedures. Phil Whaley is scheduled to receive DOT training regarding hazardous waste shipping regulations, but regulations for Large Quantity Generators require company personnel be trained within six months of hiring, with annual updates. DOT training does not provide adequate training for a hazardous waste handling supervisor.

REMARKS

Of the four hazardous waste streams listed on the 2001 Annual Hazardous Waste Stream Report, one is a liquid and the others are solids. I observed that both the Annual Report and the shipping manifests gave the hazardous characteristic of corrosivity (D002) for all of the waste streams. Rule 1200-1-11-.02(3)(c)1 states that "A solid waste exhibits the characteristic of corrosivity if a . . . sample . . . (i) is aqueous and has a pH less than or equal to 2, or greater than or equal to 12.5 . . . [or] (ii) It is a liquid and corrodes steel" Therefore, since waste stream (4) is a hardened solid, not aqueous or liquid, it does not fit the definition of the corrosivity characteristic.

If MMI is able to demonstrate by sampling that they are no longer a hazardous waste generator, then the training requirement will no longer apply for site personnel.

8

Craig Smith
Hazardous Waste Unit
EAC-K

Date

CONCURRENCE

Revendra Awasthi
Supervisor, Hazardous Waste Unit
EAC-K

cc: Ruby Cable, NCO

From: Craig Smith
To: Slattery, Patrick
Date: 10/28/03 7:24AM
Subject: Re: MMI

We'll plan to receive your call in Revendra's office, 865-594-5468

>>> Patrick Slattery 10/28/03 07:51AM >>>

Show cause meeting schedule today @ 10:00 a.m. cst today. If you are not here, will be calling. Please provide phone number if different from one of yours. Thanks. Pat

From: Craig Smith
To: Slattery, Patrick
Date: 9/9/03 12:53PM
Subject: Re: MMI Trutec

That NOV was issued on 8/9/02.

It was called MMI at that time; it became MMI-Trutec, if I recall correctly, in or around February of this year.

>>> Patrick Slattery 09/09/03 11:56AM >>>

Please let me know the date the NOV was written for the 7/25/02 inspection of MMI Trutec as well as provide me a copy please.

NOTICE OF VIOLATION

September 9, 2003

Bill Moore, Owner
Moore McMillen Inc.
134 River Bend Drive
Sevierville, TN 37862

CERTIFIED MAIL

Return Receipt Requested
7000 0520 0017 8536 7195

RE: Moore McMillen Inc., EPA ID TNR 00-001-1098, Sevier County

7/25/02 inspection according to the applicable statutes and rules established by or contained in Tennessee Hazardous Waste Management Act, T.C.A. 68-212-101, et seq., and the Tennessee Hazardous Waste Management Regulations, Tennessee Rule Chapter 1200-1-11.

Dear Mr. Moore:

A copy of the report on the referenced inspection is attached.

Violations of the regulations as promulgated under the Tennessee Hazardous Waste Management Act and as observed during the inspection are enumerated in the report. These violations should immediately be brought into compliance.

Please be advised that the Tennessee Hazardous Waste Management Act (Tennessee Code Annotated, Section 68-212-114) provides for civil and/or criminal penalties of up to fifty thousand dollars (\$50,000) per day for each violation. Each day upon which such violation occurs constitutes a separate punishable offense and such person shall also be liable for any damages to the State resulting therefrom.

Please feel free to contact this office if there are questions or if additional information is needed.

Sincerely,

Craig Smith
Division of Solid Waste Management

cc: Ruby Cable, DSWM, NCO

1

**FOLLOW-UP
HAZARDOUS WASTE INSPECTION**

FACILITY/ PHYSICAL LOCATION:

MMI - Trutec Inc.
TNR 00-001-1098
134 River Bend Drive
Sevierville, Tennessee
Sevier County

PRIMARY CONTACT

Mike Hahn, Plant Engineer
MMI - Trutec Inc.
134 River Bend Drive
Sevierville, TN 37876
865-453-9186

DATE/TIME OF INSPECTION

9/23/03 / 11:00 am

INSPECTION PARTICIPANTS/TITLES/AFFILIATIONS

Phil Whaley / Plant Manager / MMI - Trutec Inc.
Mike Hahn / Plant Engineer / MMI - Trutec Inc.
Craig Smith / Division of Solid Waste Management, EAC-K

REPORT PREPARED BY

Craig Smith
Division of Solid Waste Management
2700 Middlebrook Pike, Suite 220
Knoxville, Tennessee 37921
Phone: (865) 594-5467

PURPOSE OF INSPECTION

To perform a follow-up evaluation of MMI - Trutec Inc., in compliance with the applicable requirements of the Rules and Regulations promulgated pursuant to the Hazardous Waste Management Act, T.C.A. 68-212-101 et seq., and Hazardous Waste Reduction Act, T.C.A 68-212-301 et seq.

2

ALLEGED VIOLATIONS FROM INITIAL INSPECTION

Based on visual observations and other evidence gathered during the 7/25/02, 11/6/02, 6/26/03, and 8/13/03 inspections, MMI - Trutec Inc. is alleged to have violated the following Rules Governing Hazardous Waste Management in Tennessee:

- Rule 1200-1-11-.05(2)(g)1(i) included by reference at .03(4)(e)2(iv)
Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this subparagraph. The owner or operator must ensure that this program includes all the elements described in the document required under subpart 4(iii) of this subparagraph.

In general, on-the-job training seems to have been adequate for daily operations. However, this rule requires (by reference to 4(iii)), "A written description of the type and amount of both introductory and continuing training that will be given to [each position at the facility related to hazardous waste management]." This written description did not seem to have been created as of 8/13/03, and there did not seem to be a defined "program" of training with regard to hazardous waste. Violations related to this regulation were also cited after inspections on 7/25/02, 11/6/02, 6/26/03, and 8/13/03.

INSPECTION FINDINGS FOR FOLLOW-UP INSPECTION

On 9/23/03, I attended a meeting at the office of TDEC in Knoxville with Phil Whaley and Mike Hahn of MMI - Trutec; they brought a copy of training records, dated 9/19/03, complete with a signed roster of all trainees and documentation to cover all aspects of hazardous waste management and contingency response that were covered in the training. Therefore, all violations cited as a result of the inspection on 7/25/02 have been brought into compliance.

Craig Smith
Hazardous Waste Unit
EAC-K

Date

CONCURRENCE

Revendra Awasthi
Supervisor, Hazardous Waste Unit
EAC-K

cc: Robert Nakamoto, NCO

From: Revendra Awasthi
To: Allen, Charles; Nakamoto, Robert; Putnam, Joe; Whitson, Rick; Willingham, Fred
Date: 6/9/03 9:45AM
Subject: Fwd: MMI timeline

I am forwarding a chronology of correspondence between MMI and State from Knoxville files, prepared by Craig Smith.

thanks
Revendra

CC: Smith, Craig

From: Craig Smith
To: Awasthi, Revendra
Date: 6/6/03 2:23PM
Subject: MMI timeline

Draft timeline attached.

process changed & company did not let TDGC.

Date	Correspondence / Record	Event
11/1/96	Special waste approval letter	KQ-500 sludge receives special waste approval for disposal at Carter's Valley Landfill. Environmental Control Laboratories performed analytical testing, including Cr and CN
11/1/99	Lab data "Certificate of Report"	Tri-State Analytical provides TCLP results to BFI on "Moore-McMillen Quench Sludge"; chromium result: 1.06 mg/l
9/19/00	First HW inspection	Craig Smith and Gerald Webster conduct inspection, in response to a complaint from EPA
9/22/00	Letter from MMI to EAC-K	Letter from MMI to Craig Smith regarding issues raised during 9/19 inspection
9/26/00	First NOV, and 9/19 inspection report	NOV issued for 9/19 inspection. One violation cited for "failure to determine" due to caustic rinse-water (pH of 12.9). This stream had been treated on site, but not reported.
10/9/00		Pumpstation at the end of River Bend Road (downstream from MMI) was discovered to have overflowed into a stream and partially onto a soccer field owned by Sevier County. Soil samples are taken at 2" and 6" for some metals. Also, Samples taken in a manhole indicated Cr, Fe, and CN were above discharge permitted levels. Soil results are "below RBC", according to David Kiefer, JJ&G. Significantly, Arsenic result was higher up-gradient from the spill than below.
11/2/00	"Hazardous Waste and Used Oil Notification"	MMI registers caustic wastewater as a hazardous waste stream with NCO. This step taken to resolve violation cited on 9/19/00
11/9/00	Letter from Richie, Fels, & Dillard to Guy Blackwell, Dept. of Justice (DOJ)	W. Thomas Dillard of Ritchie, Fels & Dillard, P.C. (RF&D), of Knoxville, issue a letter to Asst. U.S. Attorney General, Guy Blackwell to present MMI's case, and to propose a meeting
11/16/00	None	Bill Moore informs me by telephone that: <ul style="list-style-type: none"> • Process has been changed to keep pH of rinsewater below 11.5 • MMI has registered for EPA ID number. • BFI had already stopped accepting KQ-500 sludge. • KQ-500 sludge is now being stored in drums; two roll-offs are already full, and covered.

11/21/00 Follow-up inspection to the 9/19/00 inspection. Report filed on 12/18/00

Follow-up inspection conducted, with Revendra Awasthi. New violations alleged for:

- Precipitate from rinsewater treatment (possibly F012)
- Release of potentially hazardous material, due to evidence of a spill.

Also, the following requirements were added:

- The question of whether the solidified salt-bath sludge is a hazardous waste or not remains to be resolved. The Division will return to MMI in the near future to collect samples of KQ500 sludge, which MMI will have the option to split.
- MMI must either report the wastewater treatment sludge as a hazardous waste, or submit a special waste application for disposal as a non-hazardous industrial waste.
- The cause and nature of the apparent spill beside the building must be determined so that it can be cleaned up and to prevent any future releases.
- Steps must be taken to ensure that no nitriding salt bath material can splash or spill into the sump during normal operations.

11/22/00 Letter from H&W to EPA Region 4

Letter with background on F-listing, to discuss F-listing question and urge a meeting between MMI, EPA, and DOJ. CC to EAC-K, RF&D, and Guy Blackwell.

11/30/00 None

Meeting held at EAC-K between EAC-K HW staff, Bill Moore, and H&W to discuss F-listing question.

12/12/00 Letter from H&W to EAC-K

H&W issues letter and detailed documentation to Jack Crabtree regarding F-listing question

12/18/00 New NOV with inspection report, regarding violations alleged during 11/21/00 inspection

NOV issued for 3 violations alleged on 11/21; These violations were resolved as described in a memo from EAC-K on 9/24/02. One violation was resolved as of 3/9/01, another as of 2/12/02, and the third, for hazardous waste determination, was not resolvable until the state and MMI came into agreement on questions of definition and listing.

(9/19 violation was considered resolved on 11/2/00).

12/28/00 Letter from EAC-JC to BFI

Letter from EAC-JC to BFI's Carter Valley Landfill to withdraw special waste approval for KQ-500 sludge on the basis of "significant change" in the approved process.

1/5/01 Letter from H&W with considerable documentation

Letter from H&W to EAC-K, in response to 12/18 NOV and inspection report, with exhaustive documentation on MMI treating process, plus responses to alleged violations. CC to EPA Region 4, and RF&D

1/5/01	Letter from H&W to EPA Region 4	Letter from H&W to Betty Obenshain, EPA Region 4, regarding sample taken by EPA on 9/6/00, preliminary results of that sample, and to propose a thorough sampling and analysis plan. CV to DOJ, EAC-K, RF&D
1/8/03	Letter to EAC-JC from H&W	Letter from H&W to EAC-JC in response to withdrawal of special waste approval on 12/28, accompanied by supporting documentation. CC to EAC-K, RF&D, EPA Region 4
1/29/01		Meeting at EAC-K with HW staff from EAC-K, EAC-JC, NCO, MMI, Kolene Corp., H&W, Lamar Dunn & Assoc. to discuss F-listing, Special Waste issues, Federal investigation status, the sampling plan, and to explain the Kolene process
1/31/01	Letter from Lamar Dunn & Assoc. to EAC-K	Engineering report for wastewater pretreatment facilities at MMI, from Lamar Dunn to EAC-K CC to H&W, NCO
2/6/01		Letter from H&W to EAC-K with more details on Kolene process, MMI waste-streams, F-listing, etc. Extensive documentation included. CC to NCO, EPA Region 4, RF&D
3/1/01	Documentation from H&W to NCO	Letter from H&W to NCO with extensive documentation on Kolene process.
3/1/01	Fax from H&W to NCO	Fax from H&W to NCO: document on testing methods for Cyanide.
3/2/01	Letter from H&W to EAC-K	Letter from H&W to EAC-K to correct certain statements from H&W's letter of 1/5/01. CC to Kolene Corp.
3/9/01	CAS returns to MMI to make detailed observation of the "desludging" process	Observations recorded in a Memo, dated 3/13/01. These observations and photos were presented at a DSWM-HW retreat at Cedars of Lebanon SP, shortly afterward.
3/13/03	Memo from CAS to file	Observations of KQ-500 desludging process, made on 3/9/01.
4/3/01	Letter from H&W to EAC-K	Letter from H&W to EAC-K with results from Tri-State Analytical Lab on wastewater treatment sludge (not the KQ-500 sludge). From which data, H&W interprets that it is non-hazardous. CC to NCO, Kolene, MMI, Dan Cook of S&ME
4/9/01	Draft sampling plan	Draft sampling plan for wastes at MMI submitted to NCO by Dan Cook of S&ME.
4/19/01	Memo from NCO to EAC-K	Memo from NCO to EAC-K, concurring that KQ-500 sludge is not F011. CC to EAC-JC

4/20/01	Letter from NCO to H&W	Letter from NCO to H&W to relay concurrence that KQ-500 sludge is not F011. The following requests are included: <ul style="list-style-type: none"> • Sampling is requested to make characteristic determination of KQ-500 sludge, • Annual review of HW determinations on all solid waste streams at MMI • The 90-day "clock" begins for un-permitted hazardous wastes storage on site.
5/2/01	Letter from H&W to NCO	Letter from H&W to NCO, with detailed information related to the question of whether the wastewater treatment sludge is F012. CC to MMI, Kolene, EAC-K, S&ME
5/3/01	Letter from NCO to S&ME	Letter from NCO to S&ME, commenting on the sampling analysis plan. CC to H&W, MMI, EPA Region 4, EAC-JC
5/15/01	Letter from H&W to NCO	Letter to NCO from H&W regarding destruction of cyanide in the KQ-500 bath, with extensive documentation on the Kolene process and cyanide testing
5/31/01	Letter from H&W to Sevierville Water Systems	Letter from H&W to Sevierville Water Systems, requesting permission to continue operating the continuous flow rinse tank through July 31. CC to NCO, MMI, S&ME
6/14/01	Letter from NCO to H&W	Letter from NCO to H&W, in response to letter from H&W on 5/2/01, to concur that wastewater treatment sludge is not F012, but ONLY during those times when cyanide was not added to the process (sludge generated when cyanide was used will be determined later). The following requests are included: <ul style="list-style-type: none"> • Wastes must be tested for hazardous characteristic • The 90-day 'clock' will begin when any hazardous characteristics are determined • Hazardous determinations must be repeated at least annually. • The state reserves the right to review this issue in the future.
6/29/01	Letter from H&W to NCO	Letter from H&W to NCO to request permission to remove treated wastewater and sludge, based on concurrence that the sludge is not F012
6/29/01	Sampling and analysis report from S&ME to H&W	Report regarding hazardous characteristic sampling of wastewater treatment sludge.
7/13/01	Letter from NCO to H&W	The state concurs with the finding that the wastewater treatment sludge is not characteristically hazardous, based upon laboratory results. Further stipulates that: <ul style="list-style-type: none"> • Hazardous waste determinations should be repeated annually • The state reserves the right to review this issue.

7/19/01	Letter from H&W to NCO	Letter from H&W to Robert Nakamoto regarding F-listing questions, with supporting documentation
9/14/01	Letter from NCO to H&W	Approval of the sampling and analysis plan (SAP) submitted by S&ME on 8/23/01, with the following requests: <ul style="list-style-type: none"> • EAC-K be notified at least 24 hours in advance of sampling • If total cyanide results exceed 250 ppm, then MMI should test for reactivity.
10/4/01	Inspection Report filed on 10/9/01.	CC to EPA Region 4, EAC-K, EAC-JC I observe sampling of KQ-500 sludge from roll-offs and other sources at the facility, as conducted by S&ME under supervision of Dan Cook.
11/1/01	Teleconference	No violations cited. Held to discuss status of sludge generated during times when cyanides were added to the nitriding baths, now stored in drums on site. Participants: H&W, S&ME, NCO staff
11/2/01	Memo	Regarding teleconference on 11/1/01
4/10/02	Letter from S&ME to NCO	Requests an extension to the 90-day deadline to remove drums of hazardous waste, on the basis that MMI has been diligently removing them, but has had difficulty finding places to ship them. Per request from Bill Moore, this letter was to verify that MMI is making progress toward compliance, and has "fully cooperated" with the state in the discovery process.
4/26/02	Letter from NCO to MMI	CC to EPA Region 4, EAC-JC RCRA inspection conducted at MMI by CAS
7/25/02		One violation cited, for inadequate training on Hazardous Waste handling.
8/9/02	NOV and Inspection report for 7/25/02	Request to H&W for further information regarding F012 listing
8/20/02	From NCO to H&W	Response to request for F012 listing information. Extensive documentation attached.
9/20/02	Letter from H&W to NCO	CC to EAC-K, EAC-JC, MMI, S&ME, RF&D
9/24/02	Memo from EAC-K to NCO	Memo to explain some confusion about resolution of violations cited in NOV issued from this office on 12/18/00.
11/6/02		Follow-up inspection conducted by CAS at MMI regarding training violation
11/13/02	Second NOV and Inspection Report for 11/6/02 inspection	Second NOV filed for failure to fully correct training inadequacies.
11/13/02	Memo from EAC-K to NCO	Memo filed in lieu of a standard EAR, due to the fact that this case is already subject to penalties.
12/12/02	Letter from NCO to H&W	Letter to concur that wastewater treatment sludge generated during time when cyanide was added to the nitriding baths is NOT F012 listed waste.

Sept

[Secretary of State Web Site](#)[Instructions](#)

Name
MMI-TRUTEC, INC.

I.D. Number
0216923

Business Type*: CORPORATION
Profit/Nonprofit: FOR PROFIT
Status*: ACTIVE
Date of Formation/Qualification: 06/13/1989
Domestic/Foreign: DOMESTIC
Place of Incorporation/Organization: SEVIER
Duration: PERPETUAL
FYC(Fiscal Year Closing) Month: DECEMBER

Principal Office:

Address Line 1: 134 RIVER BEND DRIVE

Address Line 2:

City: SEVIERVILLE

State: TN

Zip: 37862

Other than USA:

Registered Agent:

Name: CT CORPORATIONSYSYSTEM

Address Line 1: 530 GAY STREET

Address Line 2:

City: KNOXVILLE

State: TN

Zip: 37902

Business Filing History

* Important Note: Business filing History includes information about (1) the basis for an inactive status and (2) the current true name and filing status of a business with an assumed name or a changed status.

Note: This information is current as of three working days prior to today's date.





DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Solid Waste Management
Fifth Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243 - 1535

Certified Mail # 7001 1940 0007 1460 1009
Return Receipt Requested

September 9, 2003

Mr. Phil Whaley, General Manager
MMI-Trutec, Incorporated
P.O. Box 4427
Sevierville, TN 37864

RE: Show Cause Meeting w/ MMI-Trutec, Incorporated (TNR 00 001 1098)

Dear Mr. Whaley:

On July 25, 2002, the Division of Solid Waste Management (Division) conducted a hazardous waste inspection at the MMI facility located at 134 River Bend Drive, Sevierville, TN 37876. The facility was cited for violating Tennessee's hazardous waste management regulations. The violations cited by the Division were described in the Notice of Violation (NOV) dated September 9, 2002. Additional follow-up inspections have been conducted at MMI-Trutec, Incorporated that have resulted in additional NOVs being issued to the facility.

The Division requests that you meet with us on Tuesday, October 28, 2003 at 10:00 a.m. CST to address the alleged violations cited in the NOVs. You should be prepared to discuss the appropriate issues, and show cause why the Division should not take enforcement action against MMI-Trutec Incorporated or should mitigate any such possible action, including the assessment of an appropriate civil penalty.

This request is based on Tennessee Code Annotated Sections 68-211-112 and 68-212-111(a), which authorizes the Commissioner or her designee, prior to any enforcement action to require the presence of an alleged violator to show cause why enforcement actions ought not to be taken by the Department. Among the enforcement actions available to the Department is the assessment of a fifty thousand (\$50,000.00) dollar per

day civil penalty for violation of the Tennessee Code Annotated Section 68-212-101 et seq.

Our offices are located on the fifth floor of the L&C Tower building at 401 Church Street in Nashville, Tennessee. You or your representatives should bring all relevant information, reports, and documents pertaining to the alleged violations, and should be prepared to discuss the issues in detail.

Should you have any questions regarding this request for a show cause meeting, please contact Patrick Slattery at (615) 532-0809.

Sincerely,



Mike Apple
Director

cc: Hector Danois, EPA Region IV, Atlanta
Mike Hahn, MMI Trutec, Inc.
Craig Smith, Knoxville EAC
Revendra Awasthi, Knoxville EAC
Charles Allen, DSWM, Nashville
Enforcement File

MMI Compliance Timeline

2002		
	Jan-02	
MMI becomes large quantity haz waste generator	Feb-02	
	Mar-02	
	Apr-02	
	May-02	
	Jun-02	
	Jul-02	
7/25/2 TDEC Inspection		
MMI General Manager attends RCRA/DOT Haz Waste Training	Aug-02	1st N.O.V. Issued for lack of haz waste handling training Cited rule 120-1-11-05(2)(g)1(i)
	Sep-02	
<i>Mike Nahan</i> 10/25/2 MMI hires an engineer to manage environmental issues	Oct-02	25 people 9-in HW.
11/6/2 TDEC Follow up Inspection	Nov-02	11/13/2 Second N.O.V. Issued
MMI-Engineer evaluates N.O.V. and determines that the facility is exempt since it is not a TSDF as referenced in the regulations		
Engineer begins evaluating MMI's procedures and begins developing procedures and better methods to train to MMI purchases drum handler for forklift	Dec-02	TDEC is not contacted to dispute N.O.V.

MMI - Compliance Timeline (continued)

2003

Obsolete chemicals are removed from the facility MMI Changes ownership to MMI-Trutec Hazardous Waste Storage area is moved inside and weekly shipments are scheduled to eliminate haz waste accumulation	Jan-03	Established satellite accumulation area for oils and flammables
Weekly inspection log is revised Internal Hazardous waste labeling system is developed and informally communicated 5-S Workplace Organization Training for Supervisors	Feb-03	
	Mar-03	
Modified equipment, developed new procedure and purchased drum dumper to add material daily to caustic bath	Apr-03	
Cleaned up obsolete equipment outside facility	May-03	
MMI Solicited opinion of a consultant concerning N.O.V. and need for haz-waste training 6/26/3 TDEC Follow up inspection	Jun-03	Consultant responds
MMI decides to develop a training plan as best practice Drum closure procedure developed Internal labeling guide documented	Jul-03	7/16/3 3rd N.O.V. Issued
PPE guide documented 8/13/3 TDEC Follow up inspection. MMI can not produce their contingency plan. MMI contacts SM&E for copy	Aug-03	8/27/3 4th N.O.V. Issued
MMI - Recieves Contingency Plan from Consulting Group Contingency plan info incorporated into haz waste training 9/19/3 MMI Conducts Haz-Waste Management Training 9/23/3 MMI goes to TDEC Knoxville to show compliance	Sep-03	9/19/3 Training 9/23/3 Knoxville Meeting
10/10/3 MMI- Trutec begins phase one of a three phase project to become a small quantity haz-waste generator	Oct-03	MMI eliminates 1,000,000 lbs, (1/3) of annual haz waste generation 10/28/3 MMI attends "Show Cause" meeting
	Nov-03	
	Dec-03	

ownership new

10-12 drums/wh. now.

thought do a best mgt procedure

EAC

SHOW CAUSE MEETING ATTENDANCE

GENERATOR/FACILITY/TRANSPORTER: MMI-Trutec, Inc.

DATE: 10/28/03

NAME	ORGANIZATION	PHONE NUMBER
Pat SLATTERY	TDGC / SWM	615-532-0809
MIKE HANN	MMI-TRUTEC	865 453-9186
Phil WHALEY	MMI-TRUTEC	865 453-9186
CRAIG SMITH	SWM } per f/cor	
R. Augustin	SWM }	

(changed) More, McMillen Industries, Inc. (SD 0216923)

(Active) More McMillen Properties, LLC was at
same address 0294024

MMI - Trustee Active - Date of formation in
6/13/1989 - same as MMI above.

(20-11-19) 10-11-19 10-11-19 10-11-19
10-11-19 10-11-19 10-11-19 10-11-19

[Faint handwritten notes at the bottom of the page]

MMI - History

Feb 2002 - Waste determined to be HW. (Large portion of waste on site to disposal of. Company got extensions and waste removed in June/July 2002 time frame.

1912-1913

Let us - think of the future to be the best
portion of work as well as the best of
improving the present and the future
is the best of the future.



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Solid Waste Management
Fifth Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243 - 1535

Certified Mail # 7003 1680 0005 5765 2540
Return Receipt Requested

October 30, 2003

Mr. Mike Hahn, Plant Engineer
MMI-Trutec, Incorporated
P.O. Box 4427
Sevierville, TN 37864

RE: Show Cause Meeting w/ MMI-Trutec, Incorporated – TNR 00-001-1098

Dear Mr. Hahn:

On October 28, 2003, the Tennessee Division of Solid Waste Management conducted a show cause meeting between representatives of MMI-Trutec, Incorporated and members of the Solid Waste Management Division. The purpose of the meeting was to discuss the violation cited in the Notices of Violation issued to the facility dated September 9, 2002, November 13, 2002, July 16, 2003 and August 27, 2003, and to provide MMI-Trutec, Incorporated with the opportunity to comment on the violation. It has been noted that the company has returned to compliance.

The Division has evaluated the facility's comments made during the meeting. Based upon that review, the Division has determined that no formal enforcement action is warranted.

Thank you for your cooperation regarding this matter. If you have any questions, please contact Pat Slattery at (615) 532-0809.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Apple", is written over a horizontal line.

Mike Apple
Director

cc: Hector Danois, EPA Region IV, Atlanta
Phil Whaley, MMI-Trutec, Incorporated
Revendra Awasthi, Knoxville EAC
Craig Smith, Knoxville EAC
Charles Allen, DSWM, Nashville
Enforcement File

From: Craig Smith
To: Slattery, Patrick
Date: 10/30/03 7:07AM
Subject: Re: MMI-Trutec

I support this decision.

>>> Patrick Slattery 10/29/03 05:22PM >>>

Discussed the teleconference, we had some time ago, and the show cause with MMI-Trutec w/Chuck Allen and we believe a warning letter would still be adequate and appropriate especially in light of new owners in 2003. Apparently the criminal investigation by EPA really hampered the trust and their openness in working with the EAC to understand the training violation did apply to them.

Any comments to our enforcement decision let me know and I will present to Mike when I offer up our position since he has to actually make the approval decision.
Thanks for your help at show cause.

From: Revendra Awasthi
To: Slattery, Patrick; Smith, Craig
Date: 10/30/03 8:14AM
Subject: Re: MMI-Trutec

Pat: This is fine with me.
thanks
Revendra

>>> Patrick Slattery 10/29/03 05:22PM >>>

Discussed the teleconference, we had some time ago, and the show cause with MMI-Trutec w/Chuck Allen and we believe a warning letter would still be adequate and appropriate especially in light of new owners in 2003. Apparently the criminal investigation by EPA really hampered the trust and their openness in working with the EAC to understand the training violation did apply to them.

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Thanks for your help at show cause.



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Solid Waste Management
Fifth Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243 - 1535

Certified Mail # 7003 1680 0005 5765 2557
Return Receipt Requested

November 4, 2003

Mr. Mike Hahn, Plant Engineer
MMI-Trutec, Incorporated
P.O. Box 4427
Sevierville, TN 37864

RE: Show Cause Meeting w/ MMI-Trutec, Incorporated – TNR 00-001-1098

Dear Mr. Hahn:

The Tennessee Division of Solid Waste Management (Division) conducted a hazardous waste compliance evaluation inspection at MMI-Trutec, Incorporated on July 25, 2002. The facility was cited for a violation, which was detailed in the Notice of Violation (NOV) dated September 9, 2002. Several follow-up inspections were conducted in which portions of the violation still had not been corrected and reported in additional NOVs. The facility returned to compliance in September 2003.

On October 28, 2003, the Tennessee Division of Solid Waste Management conducted a show cause meeting between representatives of MMI-Trutec, Incorporated and members of the Solid Waste Management Division. The purpose of the meeting was to discuss the violation cited in the Notices of Violation and to provide MMI-Trutec, Incorporated with the opportunity to comment on the violation.

Because of the nature of the violation, because there was no evidence of harm to human health or the environment, because the facility has taken strong actions to prevent reoccurrence of violation, and because the Knoxville EAC supports this action, further enforcement action is not warranted at this time. However, the facility is strongly urged to continue to enforce the stringent hazardous waste management practices the facility has recently established.

Thank you for your cooperation regarding this matter. If you have any questions, please contact Pat Slattery at (615) 532-0809.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mike Apple". The signature is stylized with a large, looped "M" and a cursive "Apple".

Mike Apple
Director

cc: Hector Danois, EPA Region IV, Atlanta
Phil Whaley, MMI-Trutec, Incorporated
Revendra Awasthi, Knoxville EAC
Craig Smith, Knoxville EAC
Charles Allen, DSWM, Nashville
Enforcement File